3611 South Harbor Boulevard Suite 260 Santa Ana, CA 92704 731.431.4100 Fax 714.825.0685



June 6, 2002

Mr. Roger Baker City Planner CITY OF BURBANK 275 East Olive Avenue Burbank, California 91502

Clayton Project No. 80-98191.00

Subject: Status Report of Vapor Extraction System Operation - Lockheed-Martin

B-1 Site – January 29, 2002 through April 29, 2002

Dear Mr. Baker:

The following status report has been prepared by Clayton Group Services, Inc. (Clayton) for the Vapor Extraction System (VES) operation at Lockheed-Martin B-1 Site for the period between January 29, 2002 and April 29, 2002. It includes the following items:

- Background
- Clayton Field Activities
- Results of Laboratory Analysis
- Health Risk Assessment Calculations
- Conclusions

BACKGROUND

Alton Geoscience conducted a "Phase I" and "Phase II" of VES effluent sampling and health risk assessment for the Lockheed-Martin B-1 facility. Phase I consisted of twelve weekly health risk reports based on samples collected between September 2, 1997 and February 9, 1998. Phase II included twelve bi-weekly health risk assessments based on samples collected between February 16, 1998 and September 9, 1998. Phase III consisted of monthly sampling between October and December 1998.



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Phase IV of the VES effluent sampling consists of VES effluent sample acquisition, laboratory analyses, and health risk assessments to be performed once per quarter for the remainder of the project. The first and second quarterly health risk assessments were provided by Alton in reports dated January 18, 1999 and May 24, 1999, respectively.

Clayton subsequently has conducted quarterly sampling of the units and has routinely reported the results. These reports were issued as follows:

- November 23, 1999, which addressed the temporary shutdown of the system on October 14, 1999 for rebound testing;
- March 13, 2000, for the period following restart of the system;
- May 16, 2000 for the period through March 2000;
- March, July 12, 2000 for the period through June 2000
- November 17, 2000, for the period through September 2000.
- February 22, 2001, for the period through January 2001
- May 31, 2001, for the period through April 2001
- August 21, 2001, for the period through August 5, 2001
- November 12, 2001 for the period through October 19, 2001
- March 29, 2002 for the period through January 28, 2002

CLAYTON FIELD ACTIVITIES

On April 29, 2002 personnel from Clayton met with Earth Tech personnel to conduct sampling of air emissions at the Lockheed-Martin B-1 Site VES. Clayton and Earth Tech personnel each collected an exhaust sample using an evacuated Summa canister, connected via a disposable Teflon® tube to the VES unit's sampling port.

During the sampling period, the exhaust flow rate was 917 scfm. The two stack analyzers monitoring volatile organic compound (VOC) concentration showed good correlation with readings of 0.46 and 0.48 ppm. The VOC emission rate readings were



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within acceptable operating conditions for the VES. The 15 minute and 24 hour average VOC emissions rates indicated at the time were 0.2880 and 0.2049 lbs/day, respectively.

The sample collected by Clayton was delivered to Air Toxics LTD in Folsom, California for analysis by gas-chromatograph/mass spectrometry (GS/MS) in accordance with EPA Method TO-14.

RESULTS OF LABORATORY ANALYSES

The results from the TO-14 analysis of the sample taken on April 29, 2002 indicated that seven (7) compounds were present in concentrations above detection limits. Following are a list of these compounds and the concentrations indicated by the analysis:

Compound	Concentration (ppmv) ¹
Freon 11	0.001
Dichlorodifluoromethane (Freon 12)	0.030
1,1-Dichloroethylene (DCE)	0.045
Perchloroethylene (PCE)	0.170
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0019
Methylene chloride	0.001
Trichloroethylene (TCE)	0.032

¹ ppmv = parts per million by volume

These results reflect a continuation of the downward trend in concentration that has been occurring since August of 2001. The TCE concentration is now approximately one tenth of the October 2001 level (0.032 versus 0.340 ppmv). These concentrations are now approaching those observed prior to the rebound testing in October 1999.

Using the analytical data, an overall VOC emission rate of 0.127 lb/day was calculated. This value is somewhat lower than the previously discussed 24 hour average VOC reading (0.2049 lbs/day) provided by the continuous monitoring system. However, both the monitored and calculated VOC emission levels are well below the Conditional Use Permit (CUP) limit of 9.8 pounds per day. This result along, with the previous calculated total VOC emissions for the unit, were plotted on Figure 1. Vinyl chloride was not detected in the sample taken. Therefore, its CUP limit of 0.14 pounds per day was not exceeded.



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HEALTH RISK ASSESSMENT CALCULATIONS

In accordance with the CUP, the stack concentrations of each constituent and the exhaust flow rates were used to calculate the excess cancer risk resulting from operation of the VES. The first risk calculation was to determine the risk if the unit was operated for a lifetime period of 70 years, evaluating the risk to both workers and local residents for those chemicals specified in SCAQMD Rule 1401, as adopted at the time the unit was permitted. The second risk calculation was to determine the risk to both workers and local residents for the life of the project (the 8.5 year operating period), for all detected chemicals for which carcinogenic risk factors are available.

The resulting cancer risk calculations for both conditions indicated an acceptable Maximum Individual Cancer Risk (MICR) significantly less than one in one million. The results from these calculations, along with the MICR results from previous calculations for the unit, are presented on Figures 2 and 3, for 70 year and 8.5 year calculations respectively.

CONCLUSIONS

Based on the results of the information gathered and samples taken on April 29, 2002, the following conclusions can be made:

VOC emissions from the VES are well below the CUP limit of 9.8 pounds per day. Since vinyl chloride was not detected, its CUP limit of 0.14 pounds per day was not exceeded. VOC emission rates have had significant fluctuations during the last two year period but remain well below those during the initial startup of the unit. These levels may be a result of eventual desiccation (drying) of clay layers due to constant long term air flow resulting in the increased volatilization of VOC components, particularly TCE and PCE.

Excess cancer risks (MICR) were less than one in one million for workers and local residents, using both 70-year lifetime and 8.5-year operating period risk calculations.

VOC concentrations in the extracted vapor are now approaching those observed prior to the rebound testing in October 1999. It appears the system is just doing its job removing underground contaminants. The fluctuations may continue for some time but should eventually reach an asymptotic level as residual contaminant levels are reached.



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If you have any questions or require additional information regarding this status report, please contact me at (714) 431-4157 or Gustavo Valdivia at (714) 431-4113.

Sincerely,

Martin L. McClintock, P.E. No. 5025

Project Engineer

Environmental Services

Martin & Mc Clintock

Attachments: Figure 1 - Daily VOC Emissions

Figure 2 - Human Health Risk (70 Year Lifetime)

Figure 3 - Human Health Risk (8.5 Year Operating Period)

Laboratory Report

cc: Ms. Stacey Ebiner, South Coast Air Quality Management District

George Illes, South Coast Air Quality Management District

FIGURE 1 - DAILY VOC EMISSIONS LOCKHEED B-1 VES Independent Monitoring Data

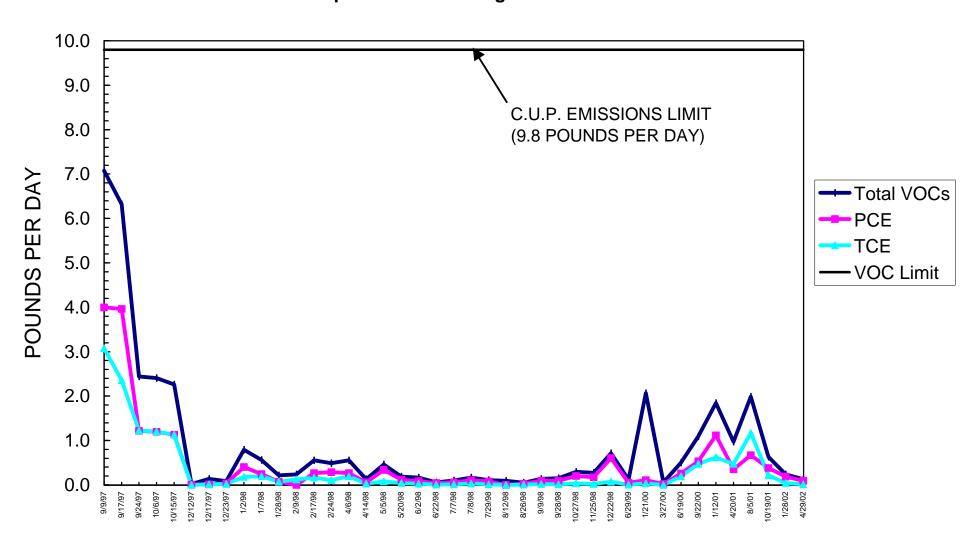


FIGURE 1

FIGURE 2 - HUMAN HEALTH RISK LOCKHEED B-1 VES SCAQMD RULE 1401 CHEMICALS HYPOTHETICAL 70 YEAR LIFETIME

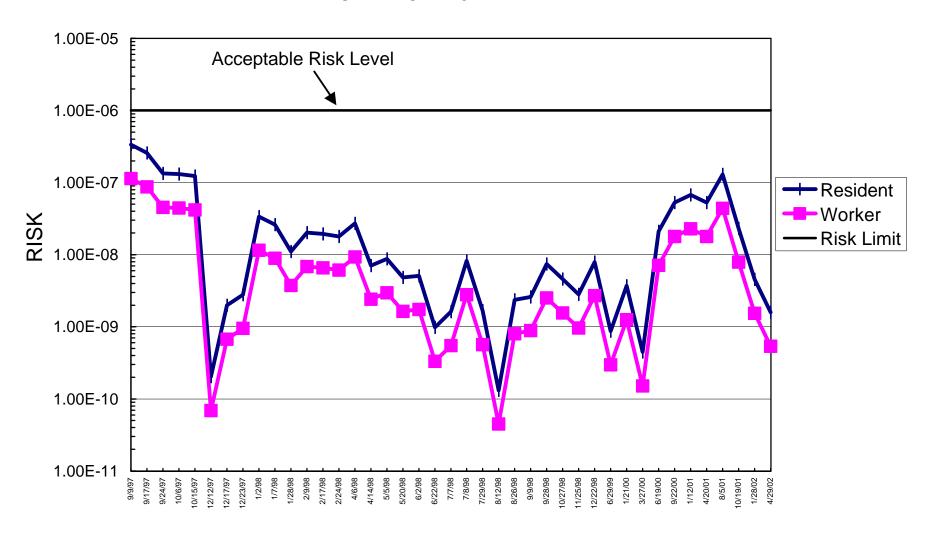
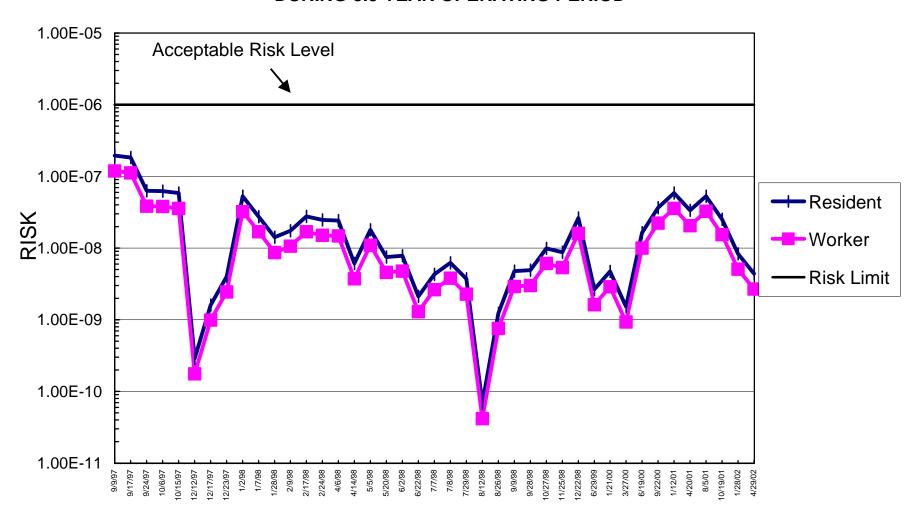


FIGURE 3 - HUMAN HEALTH RISK LOCKHEED B-1 VES DURING 8.5 YEAR OPERATING PERIOD





AN ENVIRONMENTAL ANALYTICAL LABORATORY

Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0205024

Work Order Summary

CLIENT: Mr. Bill Gendron BILL TO: Mr. Bill Gendron

Clayton Group Services 3611 S Harbor Boulevard #260

Santa Ana, CA 92704

Santa Ana, CA 92704

Clayton Group Services

3611 S Harbor Boulevard #260

PHONE: 714-431-4100 **P.O.** # NR

FAX: 714-825-0685 **PROJECT** # 80 98191.00 City of Burbank

DATE RECEIVED: 5/1/02 **CONTACT:** Lisa Argento

DATE COMPLETED: 5/15/02

			RECEIPT
FRACTION #	<u>NAME</u>	<u>TEST</u>	VAC./PRES.
01A	B-1-VES-42902	TO-14	8.0 "Hg
02A	Lab Blank	TO-14	NA
03A	LCS	TO-14	NA

Sinda d. Truman		
CERTIFIED BY:	DATE:	05/15/02

Laboratory Director

Certification numbers: CA ELAP - 1149, NY NELAP - 11291, UT ELAP - E-217, LA - AI 30763

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,

Accreditation number: E87680, Effective date: 01/01/02, Expiration date: 06/30/02

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630 (916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE TO-14

Clayton Environmental Workorder# 0205024

One 6 Liter Summa Canister sample was received on May 01, 2002. The laboratory performed analysis via EPA Method TO-14 using GC/MS in the full scan mode. The method involves concentrating up to 0.5 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. See the data sheets for the reporting limits for each compound.

During the five point calibration, two low-level standards are used. The low-level standard for TO-14 compounds is spiked at 0.5 ppbv and represents the reporting limit for these compounds. The low-level standard for the non-TO-14 compounds is spiked at 2.0 ppbv and represents the reporting limit for these compounds. The TO-14 compounds are present in both standards but are excluded from reporting in the 2.0 ppbv standard since a lower level is already included in the curve.

Method modifications taken to run these samples include:

Requirement	TO-14	ATL Modifications
Internal standard retention times.	Not specified.	Within 0.50 minutes of most recent daily CCV internal standards
Internal standard recoveries.	Not specified.	Within 40% of the daily CCV internal standard area for blanks and samples.
Initial calibration criteria.	Not specified.	RSD of 30% or less for standard compounds, 40% or less for non-standard and polar compounds
Continuing calibration verification criteria	Not specified.	70 - 130% for at least 90% of standard compounds, 60 - 140% for at least 80% of non-standard and polar compounds

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicates as follows:

- B Compound present in laboratory blank greater than reporting limit (background subtraction no performed).
 - J Estimated value.
 - E Exceeds instrument calibration range.
 - S Saturated peak.
 - Q Exceeds quality control limits.
 - U Compound analyzed for but not detected above the reporting limit.
 - N The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

SAMPLE NAME: B-1-VES-42902

ID#: 0205024-01A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	g050825	Date of Collection: 4/29/02
Dil. Factor:	1.83	Date of Analysis: 5/9/02

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.92	4.6	30	150
Freon 114	0.92	6.5	Not Detected	Not Detected
Chloromethane	0.92	1.9	Not Detected	Not Detected
Vinyl Chloride	0.92	2.4	Not Detected	Not Detected
Bromomethane	0.92	3.6	Not Detected	Not Detected
Chloroethane	0.92	2.4	Not Detected	Not Detected
Freon 11	0.92	5.2	1.0	6.0
1,1-Dichloroethene	0.92	3.7	4.5	18
Freon 113	0.92	7.1	1.9	14
Methylene Chloride	0.92	3.2	1.0	3.6
1,1-Dichloroethane	0.92	3.8	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.92	3.7	Not Detected	Not Detected
Chloroform	0.92	4.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.92	5.1	Not Detected	Not Detected
Carbon Tetrachloride	0.92	5.8	Not Detected	Not Detected
3enzene	0.92	3.0	Not Detected	Not Detected
1,2-Dichloroethane	0.92	3.8	Not Detected	Not Detected
Frichloroethene	0.92	5.0	32	170
1,2-Dichloropropane	0.92	4.3	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.92	4.2	Not Detected	Not Detected
Foluene	0.92	3.5	Not Detected	Not Detected
rans-1,3-Dichloropropene	0.92	4.2	Not Detected	Not Detected
1,1,2-Trichloroethane	0.92	5.1	Not Detected	Not Detected
Tetrachloroethene	0.92	6.3	170	1200
Ethylene Dibromide	0.92	7.1	Not Detected	Not Detected
Chlorobenzene	0.92	4.3	Not Detected	Not Detected
Ethyl Benzene	0.92	4.0	Not Detected	Not Detected
m,p-Xylene	0.92	4.0	Not Detected	Not Detected
o-Xylene	0.92	4.0	Not Detected	Not Detected
Styrene	0.92	4.0	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.92	6.4	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.92	4.6	Not Detected	Not Detected
1,2,4-Trimethylbenzene	0.92	4.6	Not Detected	Not Detected
1,3-Dichlorobenzene	0.92	5.6	Not Detected	Not Detected
1,4-Dichlorobenzene	0.92	5.6	Not Detected	Not Detected
Chlorotoluene	0.92	4.8	Not Detected	Not Detected
1,2-Dichlorobenzene	0.92	5.6	Not Detected	Not Detected
1,2,4-Trichlorobenzene	3.7	28	Not Detected	Not Detected
Hexachlorobutadiene	3.7	40	Not Detected	Not Detected
Propylene	3.7	6.4	Not Detected	Not Detected
1,3-Butadiene	3.7	8.2	Not Detected	Not Detected
Acetone	3.7	8.8	Not Detected	Not Detected

SAMPLE NAME: B-1-VES-42902

ID#: 0205024-01A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	g050825	Date of Collection: 4/29/02
Dil. Factor:	1.83	Date of Analysis: 5/9/02

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	3.7	12	Not Detected	Not Detected
2-Propanol	3.7	9.1	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.7	15	Not Detected	Not Detected
Vinyl Acetate	3.7	13	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.7	11	Not Detected	Not Detected
Hexane	3.7	13	Not Detected	Not Detected
Tetrahydrofuran	3.7	11	Not Detected	Not Detected
Cyclohexane	3.7	13	Not Detected	Not Detected
1,4-Dioxane	3.7	13	Not Detected	Not Detected
Bromodichloromethane	3.7	25	Not Detected	Not Detected
4-Methyl-2-pentanone	3.7	15	Not Detected	Not Detected
2-Hexanone	3.7	15	Not Detected	Not Detected
Dibromochloromethane	3.7	32	Not Detected	Not Detected
Bromoform	3.7	38	Not Detected	Not Detected
4-Ethyltoluene	3.7	18	Not Detected	Not Detected
Ethanol	3.7	7.0	Not Detected	Not Detected
Methyl tert-Butyl Ether	3.7	13	Not Detected	Not Detected
Heptane	3.7	15	Not Detected	Not Detected

Container Type: 6 Liter Summa Canister

		wethod	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	122	70-130	
Toluene-d8	111	70-130	
4-Bromofluorobenzene	100	70-130	

SAMPLE NAME: Lab Blank ID#: 0205024-02A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	g050806	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 5/8/02

	1100		24.0 0.7 mary 0.01 0/0/02	
Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.50	2.5	Not Detected	Not Detected
Freon 114	0.50	3.6	Not Detected	Not Detected
Chloromethane	0.50	1.0	Not Detected	Not Detected
Vinyl Chloride	0.50	1.3	Not Detected	Not Detected
Bromomethane	0.50	2.0	Not Detected	Not Detected
Chloroethane	0.50	1.3	Not Detected	Not Detected
Freon 11	0.50	2.8	Not Detected	Not Detected
1,1-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Freon 113	0.50	3.9	Not Detected	Not Detected
Methylene Chloride	0.50	1.8	Not Detected	Not Detected
1,1-Dichloroethane	0.50	2.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Chloroform	0.50	2.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Carbon Tetrachloride	0.50	3.2	Not Detected	Not Detected
Benzene	0.50	1.6	Not Detected	Not Detected
1,2-Dichloroethane	0.50	2.0	Not Detected	Not Detected
Trichloroethene	0.50	2.7	Not Detected	Not Detected
1,2-Dichloropropane	0.50	2.3	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
Toluene	0.50	1.9	Not Detected	Not Detected
trans-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
1,1,2-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Tetrachloroethene	0.50	3.4	Not Detected	Not Detected
Ethylene Dibromide	0.50	3.9	Not Detected	Not Detected
Chlorobenzene	0.50	2.3	Not Detected	Not Detected
Ethyl Benzene	0.50	2.2	Not Detected	Not Detected
m,p-Xylene	0.50	2.2	Not Detected	Not Detected
o-Xylene	0.50	2.2	Not Detected	Not Detected
Styrene	0.50	2.2	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.50	3.5	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,2,4-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,3-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
Chlorotoluene	0.50	2.6	Not Detected	Not Detected
1,2-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,2,4-Trichlorobenzene	2.0	15	Not Detected	Not Detected
Hexachlorobutadiene	2.0	22	Not Detected	Not Detected
Propylene	2.0	3.5	Not Detected	Not Detected
1,3-Butadiene	2.0	4.5	Not Detected	Not Detected
Acetone	2.0	4.8	Not Detected	Not Detected

SAMPLE NAME: Lab Blank ID#: 0205024-02A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	g050806	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 5/8/02

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	2.0	6.3	Not Detected	Not Detected
2-Propanol	2.0	5.0	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.0	8.0	Not Detected	Not Detected
Vinyl Acetate	2.0	7.2	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	Not Detected	Not Detected
Hexane	2.0	7.2	Not Detected	Not Detected
Tetrahydrofuran	2.0	6.0	Not Detected	Not Detected
Cyclohexane	2.0	7.0	Not Detected	Not Detected
1,4-Dioxane	2.0	7.3	Not Detected	Not Detected
Bromodichloromethane	2.0	14	Not Detected	Not Detected
4-Methyl-2-pentanone	2.0	8.3	Not Detected	Not Detected
2-Hexanone	2.0	8.3	Not Detected	Not Detected
Dibromochloromethane	2.0	17	Not Detected	Not Detected
Bromoform	2.0	21	Not Detected	Not Detected
4-Ethyltoluene	2.0	10	Not Detected	Not Detected
Ethanol	2.0	3.8	Not Detected	Not Detected
Methyl tert-Butyl Ether	2.0	7.3	Not Detected	Not Detected
Heptane	2.0	8.3	Not Detected	Not Detected

Container Type: NA - Not Applicable

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	99	70-130
1-Bromofluorobenzene	88	70-130

SAMPLE NAME: LCS ID#: 0205024-03A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	g050804	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 5/8/02

			•
Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	%Recovery
Freon 12	0.50	2.5	108
Freon 114	0.50	3.6	96
Chloromethane	0.50	1.0	104
Vinyl Chloride	0.50	1.3	107
Bromomethane	0.50	2.0	98
Chloroethane	0.50	1.3	103
Freon 11	0.50	2.8	98
1,1-Dichloroethene	0.50	2.0	95
Freon 113	0.50	3.9	86
Methylene Chloride	0.50	1.8	102
1,1-Dichloroethane	0.50	2.0	102
cis-1,2-Dichloroethene	0.50	2.0	94
Chloroform	0.50	2.5	95
1,1,1-Trichloroethane	0.50	2.8	101
Carbon Tetrachloride	0.50	3.2	96
Benzene	0.50	1.6	89
1,2-Dichloroethane	0.50	2.0	84
Trichloroethene	0.50	2.7	84
1,2-Dichloropropane	0.50	2.3	98
cis-1,3-Dichloropropene	0.50	2.3	79
Toluene	0.50	1.9	107
trans-1,3-Dichloropropene	0.50	2.3	79
1,1,2-Trichloroethane	0.50	2.8	79
Tetrachloroethene	0.50	3.4	84
Ethylene Dibromide	0.50	3.9	105
Chlorobenzene	0.50	2.3	94
Ethyl Benzene	0.50	2.2	103
m,p-Xylene	0.50	2.2	109
o-Xylene	0.50	2.2	120
Styrene	0.50	2.2	97
1,1,2,2-Tetrachloroethane	0.50	3.5	88
1,3,5-Trimethylbenzene	0.50	2.5	98
1,2,4-Trimethylbenzene	0.50	2.5	95
1,3-Dichlorobenzene	0.50	3.0	81
1,4-Dichlorobenzene	0.50	3.0	78
Chlorotoluene	0.50	2.6	82
1,2-Dichlorobenzene	0.50	3.0	80
1,2,4-Trichlorobenzene	2.0	15	67 Q
Hexachlorobutadiene	2.0	22	58 Q
Propylene	2.0	3.5	124
1,3-Butadiene	2.0	4.5	123
Acetone	2.0	4.8	103

SAMPLE NAME: LCS ID#: 0205024-03A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	g050804	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 5/8/02

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	%Recovery
Carbon Disulfide	2.0	6.3	87
2-Propanol	2.0	5.0	108
trans-1,2-Dichloroethene	2.0	8.0	110
Vinyl Acetate	2.0	7.2	112
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	106
Hexane	2.0	7.2	115
Tetrahydrofuran	2.0	6.0	131
Cyclohexane	2.0	7.0	96
1,4-Dioxane	2.0	7.3	77
Bromodichloromethane	2.0	14	79
4-Methyl-2-pentanone	2.0	8.3	104
2-Hexanone	2.0	8.3	88
Dibromochloromethane	2.0	17	83
Bromoform	2.0	21	63
4-Ethyltoluene	2.0	10	111
Ethanol	2.0	3.8	109
Methyl tert-Butyl Ether	2.0	7.3	94
Heptane	2.0	8.3	110

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	111	70-130
4-Bromofluorobenzene	111	70-130



CHAIN-OF-CUSTODY RECORD

with all applicable locar, State, Federa, national, and international laws, regulations and (916) 995-1000. FAX: (916) 985-1020. Sample Transportation Notice
Reliability in the document indicates that sample a being applied in complance FOLSOM, CA 95630-47: 9 handling or shipping of these samples. Relinguishing algorature also indicates agreement to hold harmloss, defend, and indemedy Air Tosics, Limited against any dams, comunic, or action of any kind, related to the collection, hardling, or shipping of samples, 0.0.1. Hattine (800) 467-4522. ardnances of any kind. Air Toxics Limited assumes no liability with respect to the collection,

Page / of

Collected	3611 S HARBOR #200	City Sarta Austral Of Zip	Sarta Arestate Chizin Pierel	Project Name Coty of Sulve	PA CI	nal Specify Au G. 61-72	
900	Field Sample I.D. B-1-765-42402	Date & Timo	Analy	Analyses Requested To - 1-(Canister nutsi	Canister Pressure / Vacuum nital Final Receipt S.o. 7 8.0 %	S 0"4
8 8 8	Referentiehed Eyr (Signatum) Date/Time The Port Constitution Date/Time Referentiehed By (Signatum) Date/Time	Regelved Br. (Bignature) Date/Time Regelved Br. (Bignature) Date/Time Tr. S Freenhed Br. (Bignature) Date/Time	Time Silve (03	Notes: Pleas end: 1 resolts to Govaldivia Celantrongerp. com and mail hand copy.	1 results @clautong and copy	145.	com
Lab	Shipper Name Air 1	834 024 2628 GJ	y: Temp. (°C)	Condition Custocy Seals Infact?	18	0 2 0 5 0 2 4	2.4